Installation and Operating Guide | Warranty

Model Number | DVB216 | **DVD Player**

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zenith

Safety Precautions

WARNING

RISK OF ELECTRIC SHOCK DO NOT OPEN

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR ÉVITER LES CHOC ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

WARNING: Do not install this equipment in a confined space such as a book case or similar unit.

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

CAUTION:

This Digital Video Disc Player employs a Laser System.

To ensure proper use of this product, please read this owner's manual carefully and retain for future reference should the unit require maintenance, contact an authorized service location (see service procedure).

Use of controls, adjustments, or the performance of procedures other than those specified herein may result in hazardous radiation exposure.

To prevent direct exposure to laser beam, do not try to open the enclosure. Visible laser radiation when open. DO NOT STARE INTO BEAM.

CAUTION: The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.

FCC WARNING: This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION: FCC Part 15

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the product is operated in a residential installation. This product generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the product and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC COMPLIANCE: The responsible party for this product's compliance is: Zenith Electronics Corporation, 2000 Millbrook Drive, Lincolnshire, IL 60069, USA.
Phone: 1-847-941-8000

NOTES ON COPYRIGHTS:

It is forbidden by law to copy, broadcast, show, broadcast via cable, play in public, or rent copylighted material without permission.

This product features the copy protection function developed by Macrovision. Copy protection signals are recorded on some discs. When recording and playing the pictures of these discs on a VCR, picture noise will appear.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

SERIAL NUMBER: The serial number is found on the back of this unit. This number is unique to this unit and not available to others. You should record requested information here and retain this guide as a permanent record of your purchase.

Model No. _____

Serial No. _____

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS OWNER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.

This set has been designed and manufactured to assure personal safety. Improper use can result in electric shock or fire hazard. The safeguards incorporated in this unit will protect you if you observe the following procedures for installation, use, and servicing.

This unit does not contain any parts that can be repaired by the user.

DO NOT REMOVE THE CABINET COVER, OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.

1. **Read These Instructions**
   All the safety and operating instructions should be read before the product is operated.
2. **Follow All Instructions**
   All operating and use instructions should be followed.
3. **Keep These Instructions**
   The safety and operating instructions should be retained for future reference.
4. **Heed All Warnings**
   All warnings on the product and in the operating instructions should be adhered to.
5. **Power Sources**
   This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
6. **Grounding or Polarization**
   Do not defeat the safety purpose of the polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
7. **Ventilation**
   Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
8. **Heat**
   Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. **Water and Moisture**
   Do not use this apparatus near water. For example: near a bath tub, wash bowl, kitchen sink, Laundry tub, in a wet basement; or near a swimming pool.
10. **Cleaning**
    Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Clean only with dry cloth.
11. **Power-Cord Protection**
    Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
12. **Overloading**
    Do not overload wall outlets, extension cords, or integral convenience receptacles, this can result in a risk of fire or electric shock.
13. **Lightning**
    Unplug this apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.
14. **Object and Liquid Entry**
    Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
15. **Attachments**
    Only use attachments/accessories specified by the manufacturer.

16. **Accessories**
    Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
17. **Disc Tray**
    Keep your fingers well clear of the disc tray as it is closing. It can cause personal injury.
18. **Burden**
    Do not place a heavy object on or step on the product. The object may fall, causing serious personal injury and serious damage to the product.
19. **Connecting**
    When you connect the product to other equipment, turn off the power and unplug all of the equipment from the wall outlet. Failure to do so may cause an electric shock and serious personal injury. Read the owner's manual of the other equipment carefully and follow the instructions when making any connections.
20. **Sound Volume**
    Reduce the volume to the minimum level before you turn on the product. Otherwise, sudden high volume sound may cause hearing or speaker damage.
21. **Sound Distortion**
    Do not allow the product to output distorted sound for a longtime. It may cause speaker overheating and fire.
22. **Earphone**
    When you use the earphone, keep the volume at a moderate level. If you use the earphone continuously with high volume sound, it may cause hearing damage.
23. **Laser Beam**
    Do not look into the opening of the disc tray or ventilation opening of the product to see the source of the laser beam. It may cause sight damage.
24. **Disc**
    Do not use a cracked, deformed, or repaired disc. These discs are easily broken and may cause serious personal injury and product malfunction.
25. **Damage Requiring Service**
    Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normal, or has been dropped.
26. **Servicing**
    Do not attempt to service this product yourself as opening or removing the cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
27. **Replacement parts**
    When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
28. **Safety Check**
    Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

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About the symbols for instructions

⚠ Indicates hazards likely to cause harm to the unit itself or other material damage.

Indicates special operating features of this unit.

Indicates tips and hints for making the task easier.

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DTS and DTS Digital Out are trademarks of Digital Theater Systems, Inc.

Before Use

Playable Discs

DVD VIDEO	DVD (8 cm / 12 cm disc)
COMPACT disc DIGITAL AUDIO	Audio CD (8 cm / 12 cm disc)

In addition, this unit can play a CD-R or CD-RW that contains audio titles or MP3 files.

Notes

– Depending on the condition of the recording equipment or the CD-R/RW disc itself, some CD-R/RW discs cannot be played on the unit.
– The unit cannot play discs that contain data other than MP3 and CD-DA data.
– Do not attach any seal or label to either side (the labeled side or the recorded side) of a disc.
– Do not use irregularly shaped CDs (e.g., heart-shaped or octagonal). It may result in malfunctions.

Notes on DVDs

Some playback operations of DVDs may be intentionally fixed by software manufacturers. As this unit plays DVDs according to disc content designed by the software manufacturer, some playback features of the unit may not be available or other functions may be added. Refer also to the instructions supplied with the DVDs. Some DVDs made for business purposes may not be played on the unit.

Regional code of the DVD player and DVDs

This DVD player is designed and manufactured for playback of region 1 encoded DVD software. The region code on the labels of some DVD discs indicates which type of player can play those discs. This unit can play only DVD discs labeled 1 or ALL. If you try to play any other discs, the message “Check Regional Code” will appear on the TV screen. Some DVD discs may not have a region code label even though their playback is prohibited by area limits.

Note on DTS-encoded CDs

To avoid possible damage to the audio system, turn down the volume before playing back such discs, adjust the volume gradually, and keep the volume level low. To enjoy DTS Digital Surround™ playback, an external 5.1 channel DTS Digital Surround™ decoder system must be connected to the digital output of the unit.

Disc-related terms

Title (DVD only)

A title may be: the main film content, an accompanying feature content, or music album.
Each title is assigned a title reference number enabling you to locate it easily.

Chapter (DVD only)

Sections of a picture or a musical piece that are smaller than titles. A title is composed of one or several chapters. Each chapter is assigned a chapter number, enabling you to locate the chapter you want. Depending on the disc, chapters may not be recorded.

Track (Audio CD only)

Sections of a musical piece on an audio CD. Each track is assigned a track number, enabling you to locate the track you want.

HDCD (High Definition Compatible Digital®)

HDCD® (High Definition Compatible Digital®) is a recording system that has improved audio CD sound in dynamic range, sound field reproducibility and vocal acoustics.
This DVD player is equipped with an HDCD decoder. The HDCD indicator illuminates when playing an HDCD-encoded audio CD.

Precautions

Handling the unit

When shipping the unit
The original shipping carton and packing materials come in handy. For maximum protection, re-pack the unit as it was originally packaged at the factory.

When setting up the unit
The picture and sound of a nearby TV, VCR, or radio may be distorted during playback. In this case, position the unit away from the TV, VCR, or radio, or turn off the unit after removing the disc.

To keep the exterior surfaces clean
Do not use volatile liquids, such as insecticide spray, near the unit. Do not leave rubber or plastic products in contact with the unit for a long period of time. They will leave marks on the surface.

Cleaning the unit

To clean the cabinet
Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents such as alcohol, benzine, or thinner, as these might damage the surface of the unit.

To obtain a clear picture
The DVD player is a high-tech, precision device. If the optical pick-up lens and disc drive parts are dirty or worn, the picture quality will be poor.
Regular inspection and maintenance are recommended after every 1,000 hours of use. (This depends on the operating environment.)
For details, please contact your nearest dealer.

Notes on Discs

Handling discs

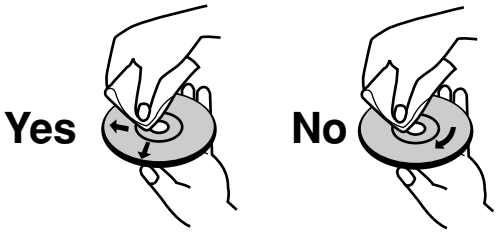
Do not touch the playback side of the disc.
Hold the disc by the edges so that fingerprints will not get on the surface.
Do not stick paper or tape on the disc.

Storing discs

After playing, store the disc in its case.
Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as there may be a considerable temperature increase inside the car.

Cleaning discs

Fingerprints and dust on the disc can cause poor picture quality and sound distortion. Before playing, clean the disc with a clean cloth. Wipe the disc from the center out.



Do not use strong solvents such as alcohol, benzine, thinner, commercially available cleaners, or anti-static spray intended for older vinyl records.

About Symbols

About the ⃠ symbol display

" ⃠ " may appear on the TV screen during operation. This icon means the function explained in this owner's manual is not available on that specific DVD video disc.

About the disc symbols for instructions

A section whose title has one of the following symbol is applicable only to the disc represented by the symbol.

DVD DVD
CD Audio CDs.
MP3 MP3 disc.

Front Panel and Display Window

POWER
Switches the player ON and OFF.

Power indicator
Lights green when the player is in Power On mode.

Forward Skip/Scan (▶▶| / ▶▶)
Go to NEXT chapter/track.
Press and hold for two seconds for a fast forward search.

Reverse Skip/Scan (|◀◀ / ◀◀)
Go to beginning of current chapter/track or to PREVIOUS chapter/track.
Press and hold for two seconds for a fast reverse search.

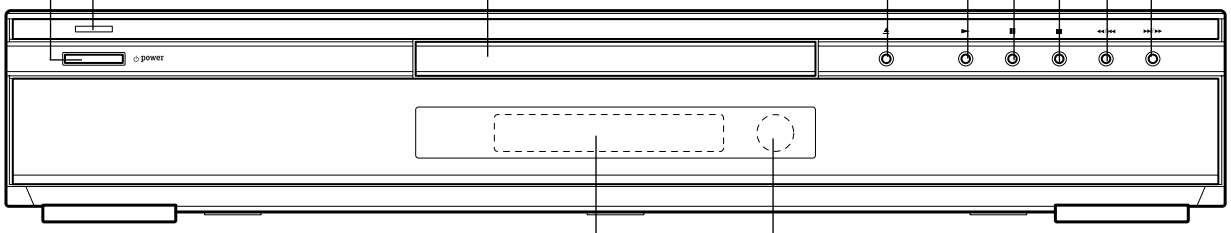
STOP (■)
Stops playback.

PAUSE (❚❚)
Pause playback temporarily/ press repeatedly for frame-by-frame playback.

PLAY (▶)
Starts playback.

Disc Tray
Insert a disc here.

OPEN/CLOSE (▲)
Opens or closes the disc tray.



Display window
Shows the current status of the player.

Remote Sensor
Point the DVD Player remote control here.

ANGLE active

DVD DVD inserted
CD Audio CD inserted
HD CD HDCD disc inserted
MP3 MP3 disc inserted

Indicates current player function: Playback, Pause, etc.

TITLE Indicates current title number

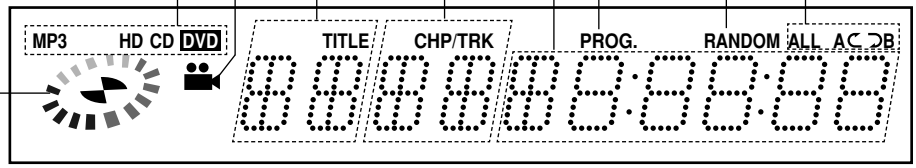
CHP/TRK Indicates current chapter or track number

Indicates total playing time/elapsed time

PROG. Programmed playback active

RANDOM RANDOM playback active

Indicates repeat mode



Remote Control

POWER
Switches DVD Player ON and OFF.

MENU
Accesses menu on a DVD disc.

DISPLAY
Accesses On-Screen display.

◄ ► ▲ ▼ (left/right/up/down)
Selects an item in the menu, channel of TV or changes the volume of the TV.

MARKER
Marks any point during playback.

SEARCH
Displays MARKER SEARCH menu.

Forward SKIP/SCAN (►►I) ●
Search forward*/ go to next chapter or track.

Reverse SKIP/SCAN (I◄◄) ●
Search backward*/ go to beginning of current chapter or track or go to previous chapter or track.

* Press and hold button for about two seconds.

STOP (■) ●
Stops playback.

PLAY (►) ●
Starts playback.

PAUSE (II) ●
Pauses playback temporarily/ press repeatedly for frame-by-frame playback.

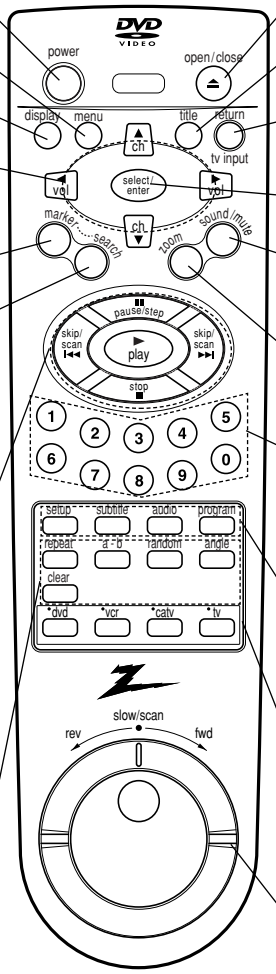
REPEAT ●
Repeat chapter, track, title, all.

A-B ●
Repeat sequence.

RANDOM ●
Plays tracks in random order.

ANGLE ●
Selects a DVD camera angle if available.

CLEAR ●
Removes a track number on the program menu or a mark on the MARKER SEARCH menu.



OPEN/CLOSE
Opens and closes the disc tray.

TITLE
Displays the discs Title menu, if available.

RETURN/TV INPUT
- Removes the setup menu.
- Selects AUX A/V input channel.

SELECT/ENTER
Acknowledges menu selection.

SOUND/MUTE
- Selects 3D SURROUND during disc playback.
- turns off TV sound.

ZOOM
Enlarges video image.

0-9 number buttons
Selects numbered items in a menu.

● SETUP
Accesses or removes setup menu.

● SUBTITLE
Selects a subtitle language.

● AUDIO
Selects an audio language (DVD) or an audio channel (CD).

● PROGRAM
Accesses or removes Program menu.

DVD/VCR/CATV/TV select buttons
Selects operational mode of remote control.

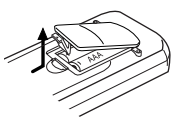
SHUTTLE ring
For variable-speed playback.

Remote Control Operation Range

Point the remote control at the remote sensor and press the buttons.

- **Distance:** About 23 ft (7 m) from the front of the remote sensor.
- **Angle:** About 30° in each direction of the front of the remote sensor.

Remote control battery installation

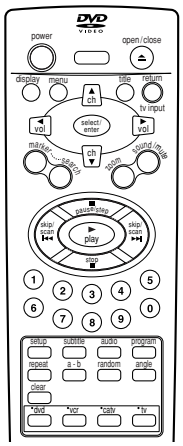


Detach the battery cover on the rear of the remote control, and insert two R03 (size AAA) batteries with ⊕ and ⊖ aligned correctly.

⚠ Caution
Do not mix old and new batteries. Never mix different types of batteries (standard, alkaline, etc.).

Controlling VCRs, Cable Boxes (DBS) and TVs

Your remote control operates the common features of most, but not all, models and brands of IR (infrared) controlled VCRs, cable converters (DBS) and TVs.



Note

Due to the variety of codes used by manufacturers, our company cannot guarantee this remote control will operate with every model of the brands listed.

1 In the chart, find the code corresponding to your brand of operational device.

2 While holding down the TV, VCR or CATV button, press 3 number buttons (0 - 9) to enter the code.

Some manufacturers have more than one code number. If the remote control does not operate the VCR, Cable box(DBS), or TV after setting a code number, try a different code.

Buttons used to operate the VCR

POWER, Number (0 - 9), CH (Channel) ▼/▲, SELECT/ENTER, PLAY, SKIP/SCAN ▶▶| (Fast Forward), SKIP/SCAN |◀◀ (Rewind), STOP, OPEN/CLOSE (EJECT) and PAUSE/STEP buttons on the remote control are activated.

Buttons used to operate the CATV (DBS)

POWER, Number (0 - 9), RETURN (TV INPUT), and CH (Channel) ▼/▲, and VOL (Volume) ▼/▲ buttons on the remote control are activated.

Buttons used to operate the TV

POWER, Number (0 - 9), RETURN (TV INPUT), CH (Channel) ▼/▲, VOL (Volume) ▼/▲ and SOUND (MUTE) buttons on the remote control are activated.

TV Codes by Brand

Brand Name	Codes
ADMIRAL	110, 113, 144, 151, 152
AKAI	115
AMARK	131
AOC	115
BELL & HOWELL	113
BROKSONIC	140, 143
CANDLE	158
CENTURION	130
CITIZEN	156, 157, 158, 159, 160, 161, 162
CORONADO	131
CROWN	131
CURTIS MATHES	113, 115, 118, 130, 144, 151
DAEWOO	145, 146, 147, 148, 149, 150
DAYTRON	115, 130
EMERSON	110, 111, 115, 131, 140, 143
FISHER	116, 125
FUNAI	153, 154
GENERAL ELECTRIC	102, 118, 127, 128, 133, 144, 151
HITACHI	119, 131, 132
JC PENNEY	102, 115, 124, 130, 133
JVC	109, 141
KMC	131
KTV	115, 130, 131, 138
LG (GOLDSTAR)	115, 122, 130, 131, 133, 146
LODGENET	113
LOGIK	113
LXI	104, 116, 123, 124, 125, 131, 139
MAGNAVOX	100, 106, 107, 109, 114, 115, 121 122, 130, 131, 133, 158
MAJESTIC	113
MARANTZ	103, 115
MEMOREX	113
MGA/MITSUBISHI	103, 114, 115, 130
MONTGOMERY WARD	103, 113, 114, 115, 121, 129, 130, 131, 139
NEC	115, 130
PANASONIC	104, 122, 127, 128, 133, 163
PHILCO	115, 121, 122, 130, 131, 150
PHILIPS	121, 122
PIONEER	134
PORTLAND	131

TV Codes by Brand

Brand Name	Codes
PROSCAN	118, 144, 151
QUASAR	127, 128
RADIO SHACK	110, 111, 129
RCA	115, 118, 144, 151
REALISTIC	110, 111, 129
SAMPO	130
SAMSUNG	104, 115, 130, 131
SANYO	116, 125
SCOTT	115, 130
SEARS	104, 116, 123, 124, 125, 131
SHARP	112, 129, 131, 139
SIGNATURE 2000	102, 113, 114, 115, 121, 129, 130, 131, 139
SONY	105
SOUNDESIGN	158
SYLVANIA	106, 107, 115, 121, 122, 130, 133, 158
SYMPHONIC	153, 154
TATUNG	128
TEKNIKA	110, 113, 122, 131, 158
TELERENT	113, 131
YORX	130
TOSHIBA	104, 123, 124
WARDS	102, 113, 114, 115, 121, 130, 131
XR1000	155
ZENITH	100, 101

CATV, Cable Converter Codes by Brand

Brand Name	Codes
ALLEGRO	351
Archer	336
Cableview	336
Citizen	336
Curtis Mathes	317
Eagle	306, 307, 310
Gemini	302, 327, 328, 333
GENERAL ELECTRIC	353
General Instrument	324, 326, 327, 328
Gobrand	336
Hamlin	314, 330, 331
Jerrold	323, 324, 325, 326, 327, 329
Kale Vision	334

CATV, Cable Converter Codes by Brand

Brand Name	Codes
Macom	311, 312, 342
Magnavox	306, 307, 310, 334, 337, 338
NSC	332
OAK	301, 321, 322
Panasonic	313, 318, 320
Paragon	300
Philips	306, 307, 308, 309, 310
Pioneer	318, 319
Pluser	336
RCA	318
Regal	310
Regency	304
Samsung	318, 327, 334
Scientific Atlanta	317, 335, 347, 354
SLmarx	318, 327
Sprucer	318, 320, 327
Standard Components	334
Stargate	318, 327, 328
Teleview	318, 327, 336
Texscan	303
Tocom	315, 316
Uniden	348
Unika	336
Universal	351, 352
Vid Tech	339
Video Way	300, 349
Viewstar	306, 307, 310
Zenith	300, 305, 311
Zenith HT-2000	300

DBS Codes by Brand

Brand Name	Codes
RCA	355
Sony	356

VCR Codes by Brand

Brand Name	Codes
ZENITH	200
LG	201

Rear Panel

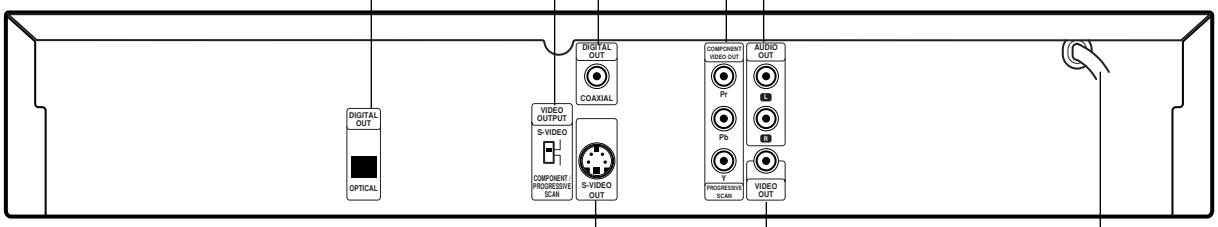
VIDEO OUTPUT Switch
Select either S-VIDEO OUT or COMPONENT VIDEO OUT/PROGRESSIVE SCAN, depending on how you connected the DVD Player to the TV.

OPTICAL (Digital audio out jack)
Connect to digital (optical) audio equipment.

COAXIAL (Digital audio out jack)
Connect to digital (coaxial) audio equipment.

COMPONENT/PROGRESSIVE SCAN VIDEO OUT (Y Pb Pr)
Connect to a TV with Y Pb Pr inputs.

AUDIO OUT (Left/Right)
Connect to an amplifier, receiver, or stereo system.

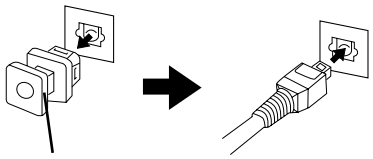


S-VIDEO OUT
Connect to a TV with S-Video inputs.

AC Power Cord
Plug into the power source.

VIDEO OUT
Connect to a TV with video inputs.

Dust protection cap
Remove the dust protection cap from the OPTICAL DIGITAL OUT jack and connect the optical digital cable (not supplied) securely so that the configurations of both the cable and the connector match. Keep the dust protection cap and always reattach the cap when not using the connector to protect against dust intrusion.



Dust protection cap

⚠

Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit.

Connections

Tips

- Depending on your TV and other equipment you wish to connect, there are various ways you could connect the player. Use only one of the connections described below.
- Please refer to the manuals of your TV, VCR, Stereo System or other devices as necessary to make the best connections.
- For better sound reproduction, connect the player's AUDIO OUT jacks to the audio in jacks of your amplifier, receiver, stereo or audio/video equipment. See *Connecting to optional equipment* on page 12.

Caution

– Make sure the DVD Player is connected directly to the TV. Tune the TV to the correct video input channel.
– Do not connect the DVD Player's AUDIO OUT jack to the phono in jack (record deck) of your audio system.
– Do not connect your DVD Player via your VCR. The DVD image could be distorted by the copy protection system.

Connecting to a TV

- Make one of the following connections, depending on the capabilities of your existing equipment.
- When using the COMPONENT VIDEO OUT/PROGRESSIVE SCAN jacks, set the VIDEO OUTPUT switch to COMPONENT. When using the S-VIDEO OUT jack, set the VIDEO OUTPUT switch to S-VIDEO.

Video connection

1 Connect the VIDEO OUT jack on the DVD Player to the video in jack on the TV using the video cable supplied **(V)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the supplied audio cables.

S-Video connection

1 Connect the S-VIDEO OUT jack on the DVD Player to the S-Video in jack on the TV using the supplied S-Video cable **(S)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the supplied audio cables.

Component Video (Color Stream®) connection

1 Connect the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks on the DVD Player to the corresponding in jacks on the TV using an optional Y Pb Pr cable **(C)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the supplied audio cables.

Progressive Scan (ColorStream® pro) connection

- If your television is a high-definition or "digital ready" television, you may take advantage of the DVD Player's progressive scan output for the highest video resolution possible.
- If your TV does not accept the Progressive Scan format, the picture will appear scrambled if you try Progressive Scan on the DVD Player.

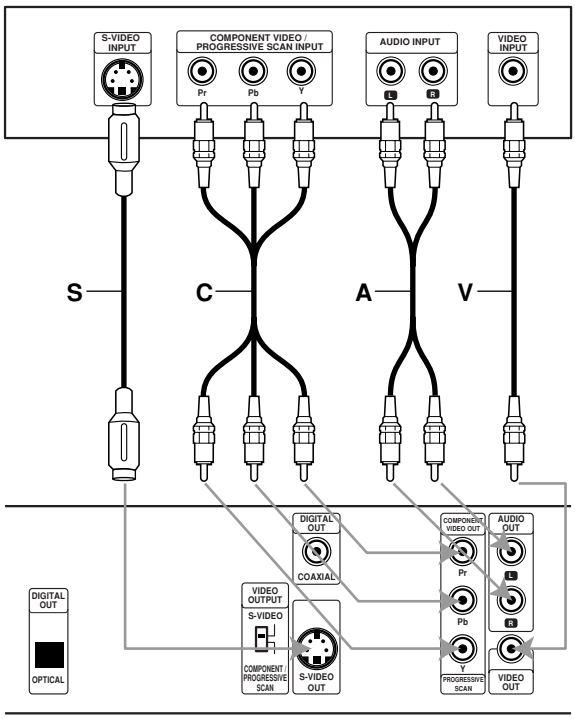
1 Connect the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks on the DVD Player to the corresponding in jacks on the TV using an optional Y Pb Pr cable **(C)**.

2 Connect the Left and Right AUDIO OUT jacks of the DVD Player to the audio left/right in jacks on the TV **(A)** using the supplied audio cables.

Notes

– Set the Progressive to "On" on the setup menu for progressive signal, see page 14.
– Progressive scan does not work with the analog video connections (yellow VIDEO OUT jack).

Rear of TV



Rear of DVD player

Connecting to Optional Equipment

Connecting to an amplifier equipped with two channel analog stereo or Dolby Surround

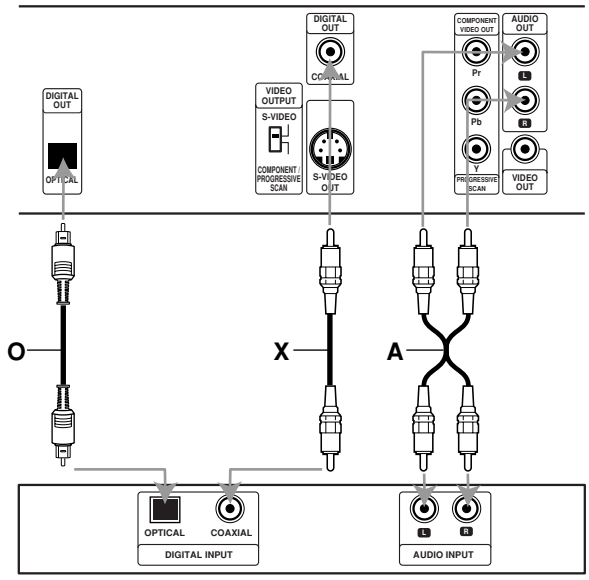
Connect the Left and Right AUDIO OUT jacks on the DVD Player to the audio left and right in jacks on your amplifier, receiver, or stereo system, using the supplied audio cables **(A)**.

Connecting to an amplifier equipped with two channel digital stereo (PCM) or to an Audio/ Video receiver equipped with a multi-channel decoder (Dolby Digital™, MPEG 2, or DTS)

1 Connect one of the DVD Player's DIGITAL AUDIO OUT jacks (OPTICAL **O** or COAXIAL **X**) to the corresponding in jack on your amplifier. Use an optional digital (optical **O** or coaxial **X**) audio cable.

2 You will need to activate the player's digital output. (See *Digital Audio Output* on page 15).

Rear of DVD player



Amplifier (Receiver)

Digital Multi-channel sound

A digital multi-channel connection provides the best sound quality. For this you need a multi-channel Audio/Video receiver that supports one or more of the audio formats supported by your DVD Player (MPEG 2, Dolby Digital and DTS). Check the receiver manual and the logos on the front of the receiver.

⚠ Caution:

Due to the DTS Licensing agreement, the digital output will be in DTS digital out when DTS audio stream is selected.

Notes

– If the audio format of the digital output does not match the capabilities of your receiver, the receiver will produce a strong, distorted sound or no sound at all.
– Six Channel Digital Surround Sound via digital connection can only be obtained if your receiver is equipped with a Digital Multi-channel decoder.
– To see the audio format of the current DVD in the on-screen display, press AUDIO.

General Explanation

This manual gives basic instructions for operating the DVD Player. Some DVDs require specific operation or allow only limited operation during playback. When this occurs, the symbol ⃠ appears on the TV screen, indicating that the operation is not permitted by the DVD Player or is not available on the disc.

On-Screen Display

General playback status can be displayed on the TV screen. Some items can be changed on the menu.

On-screen display operation

1 **Press DISPLAY during playback.**

2 **Press ▲ or ▼ to select an item.**
The selected item will be highlighted.

3 **Press ◀ or ▶ to change the setting of an item.**
The number buttons can be also be used for setting numbers (e.g., title number). For some functions, press SELECT/ENTER to execute the setting.

Temporary Feedback Field Icons

- TITLE — Repeat Title
- CHAPT — Repeat Chapter
- A B — Repeat A-B
- OFF — Repeat Off
- ▮▮■ — Resume play from this point
- ⃠ — Action prohibited or not available

Notes

- Some discs may not provide all of the features on the on-screen display example shown below.
- If no button is pressed for 10 seconds, the on-screen display disappears.

DVD

Items		Function (Press ▲/▼ to select desired item)	Selection Method
Title Number	1/3	**Shows the current title number and total number of titles, and** skips to the desired title number.	◀ / ▶, or Numbers, SELECTS/ENTER
Chapter Number	1/12	**Shows the current chapter number and total number of chapters, and** skips to the desired chapter number.	◀ / ▶, or Numbers , SELECTS/ENTER
Time search	0:16:57	**Shows the elapsed playing time, and** searches the point by the elapsed time directly.	Numbers , SELECTS/ENTER
Audio language and Digital Audio Output mode	1 ENG DD 6 CH	**Shows the current audio soundtrack language, encoding method, and channel number, and** changes the setting.	◀ / ▶
Subtitle language	OFF	**Shows the current subtitles language, and** changes the setting.	◀ / ▶
Angle	1/1	**Shows the current angle number and total number of angles, and** changes the angle number.	◀ / ▶
Sound	NORM.	**Shows the current sound mode, and** changes the setting.	◀ / ▶

Initial Settings

You can set your own Personal Preferences on the player.

Initial Settings General Operation

1 Press SETUP.
The setup menu appears.

2 Press ▲/▼ to select the desired item.
The screen will show the current setting for the selected item, as well as alternate setting(s).

3 While the desired item is selected, press ▶, then ▲/▼ to select the desired setting.

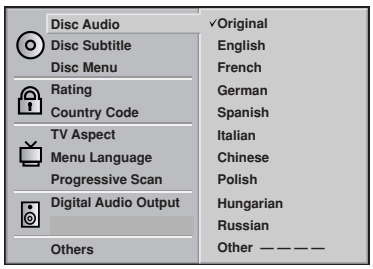
4 Press SELECT/ENTER to confirm your selection.
Some items require additional steps.

5 Press SETUP, RETURN, or PLAY to exit the setup menu.

Language

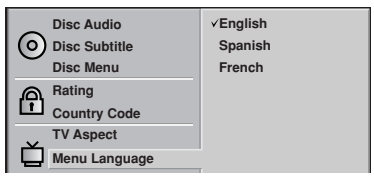
Disc Language DVD

Select a language for the disc's Menu, Audio, and Subtitle.
Original : The original language set for the disc is selected.
Other : To select another language, press number buttons to enter the corresponding 4-digit number according to the language code list on page 24. If you enter the wrong language code, press CLEAR.



Menu Language

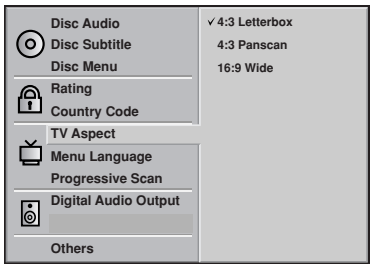
Select a language for the setup menu. This is the menu you see when you press SETUP.



Picture

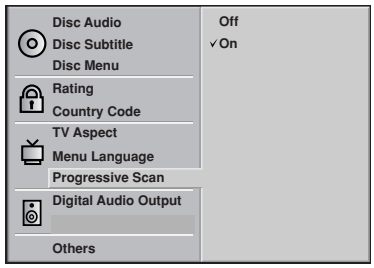
TV Aspect DVD

4:3 Letterbox: Select when a standard 4:3 TV is connected. Displays theatrical images with masking bars above and below the picture.
4:3 Panscan: Select when a standard 4:3 TV is connected. Displays pictures cropped to fill your TV screen. Both sides of the picture are cut off.
16:9 Wide: Select when a 16:9 wide TV is connected.



Progressive Scan DVD

Progressive Scan Video provides the highest quality pictures with less flickering.
If you are using the COMPONENT VIDEO OUT/ PROGRESSIVE SCAN jacks, but are connecting the DVD Player to a standard (analog) television, set Progressive Scan to Off.
If you are using the Component Video jacks for connection to a TV or monitor that is compatible with a progressive scan signal, set Progressive Scan to On.



Notes
– Progressive Scan only works when the VIDEO OUTPUT switch on the rear panel is set to COMPONENT/PROGRESSIVE SCAN.

⚠Caution
Once the setting for progressive scan output is entered, an image will only be visible on a progressive scan compatible TV or monitor. If you set Progressive Scan to On in error, you must reset the unit. Press STOP to stop any disc that is playing. Next, press STOP again and hold it for five seconds before releasing it. The video output will be restored to the standard setting, and a picture will once again be visible on a conventional analog TV or monitor.

Sound

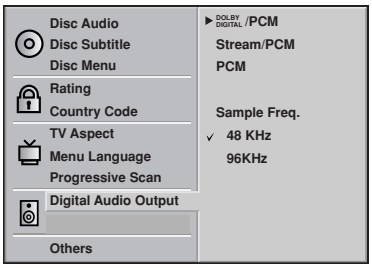
Digital Audio Output

Each DVD disc has a variety of audio output options. Set the player's Digital Audio Output according to the type of audio system you use.

DOLBY DIGITAL/PCM: Select DOLBY DIGITAL/PCM if you connected the DVD Player's DIGITAL OUT jack to a Dolby Digital decoder (or an amplifier or other equipment with a Dolby Digital decoder).

Stream/PCM: Select Stream/PCM if you connected the DVD Player's DIGITAL OUT jack to an amplifier or other equipment with a DTS decoder, Dolby Digital decoder or MPEG decoder.

PCM: select when connected to a 2-channel digital stereo amplifier. The DVD player outputs sounds in the PCM 2ch format when you play a DVD video disc recorded on the Dolby Digital, MPEG1, or MPEG2 recording system..



Sample Frequency

To change the Sample Frequency setting, first select the desired Digital Audio Output as indicated as above.

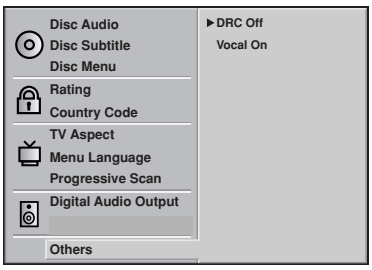
If your receiver or amplifier is NOT capable of handling 96KHz signals, select 48KHz. When this choice is made, this unit will automatically convert any 96KHz signals to 48KHz so your system can decode them.

If your receiver or amplifier is capable of handling 96KHz signals, select 96KHz. When this choice is made, this unit will pass each type of signal through without any further processing.

Others

The DRC and Vocal settings can be changed.

- Press ▲/▼ to select the desired item and press SELECT/ENTER. The setting of the selected item is changed between On and Off.



Dynamic Range Control (DRC)

With the DVD format, you can hear a program's soundtrack in the most accurate and realistic presentation possible, thanks to digital audio technology. However, you may wish to compress the dynamic range of the audio output (the difference between the loudest sounds and the quietest ones). Then, you may listen to a movie at a lower volume without losing clarity of sound. Set DRC to On for this effect.

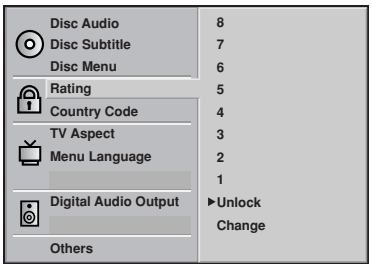
Vocal

Set Vocal to On only when a multi-channel karaoke DVD is playing. The karaoke channels on the disc will mix into normal stereo sound.

Parental Control

Rating DVD

Movies on DVDs may contain scenes not suitable for children. Therefore, discs may contain Parental Control information that applies to the complete disc or to certain scenes on the disc. These scenes are rated from 1 to 8, and alternatively, more suitable scenes are available for selection on some discs. Ratings are country-dependent. The Parental Control feature allows you to prevent discs from being played by your children or to have certain discs played with alternative scenes.



1 **Select Rating on the Setup menu using the ▲ and ▼ buttons.**

2 **While Rating is selected, press ▶.**

3 **When you have not entered a password yet.**
Enter a 4-digit password using the numbered buttons to create a personal 4-digit security password, then press SELECT/ENTER. Enter the 4-digit password again and press SELECT/ENTER to verify.
When you have already entered a password;
Enter a 4-digit password using the numbered buttons to confirm the personal 4-digit security password, then press SELECT/ENTER.

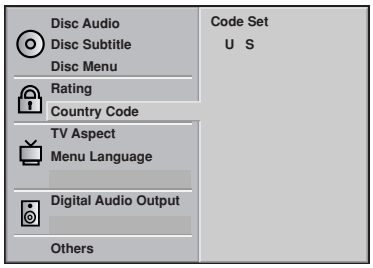
If you make a mistake before pressing SELECT/ENTER, press CLEAR and enter 4-digit security password again.

4 **Select a rating from 1 to 8 using the ▲/▼ buttons. One (1) has the least playback restrictions. Eight (8) has the most playback restrictions.**
Unlock: *If you select Unlock, Parental Control is not active. The disc will play in full.*
Ratings 1 to 8: *Some discs contain scenes not suitable for children. If you set a rating for the player, all disc scenes with the same rating or lower will be played. Higher rated scenes will not be played unless an alternative scene is available on the disc. The alternative must have the same rating or a lower one. If no suitable alternative is found, playback will stop. You must enter the 4-digit password or change the rating level in order to play the disc.*

5 **Press SELECT/ENTER to confirm your rating selection, then press SETUP to exit the menu.**

Country Code DVD

Enter the code of a country/area whose standards were used to rate the DVD video disc, referring to the list (See *Country Code List,* page 25.).



1 **Select Country Code using the ▲/▼ buttons on the setup menu.**

2 **While Country Code is selected, press ▶.**

3 **Follow step 3 of Rating on left.**

4 **Select the first character using the ▲/▼ buttons.**

5 **Shift the cursor using ◀/▶ buttons and select the second character using ▲/▼ buttons.**

6 **Press SELECT/ENTER to confirm your country code selection, then press SETUP to exit the menu.**

Note
Confirmation of the 4-digit password is necessary when the code is changed (see *Changing the 4-digit code* below).

Changing the 4-digit code

1 Follow Steps 1-2 as shown above to the left (Rating).
2 Enter the old code, then press SELECT/ENTER.
3 Select Change using the ▲/▼ buttons then press SELECT/ENTER.
4 Enter the new 4-digit code, then press SELECT/ENTER.
5 Enter exactly the same code a second time and verify by pressing SELECT/ENTER.
6 Press SETUP to exit the menu.

If you forget your 4-digit code

If you forget your password, to clear the current password, follow the procedure below.

1 Press SETUP to display the setup menu.
2 Use the Number buttons to enter the 6-digit number 210499.
The 4-digit password is cleared.
3 Enter a new code as shown above to the left (Rating).

Playing a DVD

Playback Setup DVD

- Turn on the TV and select the video input source connected to the DVD player.
- Audio system: Turn on the audio system and select the input source connected to the DVD player.

1 **Press OPEN/CLOSE to open the disc tray.**

2 **Load your chosen disc in the tray, with the label facing up.**
When a double-sided DVD is inserted, make sure the side you want to play is facing up.

3 **Press OPEN/CLOSE to close the tray.**
READING appears on the TV screen, and playback starts automatically. If playback does not start, press PLAY.
In some cases, the disc menu might appear instead.

If a menu screen is displayed

The menu screen may be displayed first after loading a DVD which contains a menu.

DVD

Use the ◄ ► ▲ ▼ buttons to select the title/chapter you want to view, then press SELECT/ENTER to start playback.
Press TITLE or MENU to return to the menu screen.

Notes

– If Parental Control is set and the disc is not within the Rating settings (not authorized), the 4-digit code must be entered and/or the disc must be authorized (see *Parental Control*, on page 16).
– DVDs may have a region code.
– Your player will not play discs that have a region code different from your player. The region code for this player is 1 (one).

General Features

Note

Unless stated otherwise, all operations described use the remote control. Some features may also be available on the Setup menu.

Moving to another TITLE DVD

When a disc has more than one title, you can move to another title as follows:

- Press DISPLAY when playback is stopped, then press the appropriate numbered button (0-9) to select a title number.

Moving to another CHAPTER

DVD

When a title on a disc has more than one chapter or a disc has more than one chapter, you can move to another chapter as follows:

- Press SKIP/SCAN I◄◄ or ►►I briefly during playback to select the next chapter or to return to the beginning of the current chapter.
- Press I◄◄ twice briefly to step back to the previous chapter.
- To go directly to any chapter during DVD playback, press DISPLAY. Then, press ▲/▼ to select C (chapter). Then, enter the chapter/track number using the numbered buttons (0-9).

Note

For two-digit numbers, press the buttons in rapid succession.

Slow Motion DVD

1 Rotate and hold SHUTTLE ring during still picture mode.
The player will enter SLOW mode.
2 Rotate and hold SHUTTLE ring forward or reverse to select the required speed: ◄II 1/16, ◄II 1/8, ◄II 1/4 or ◄II 1/2 (backward), or II► 1/16, II► 1/8, II► 1/4 or II► 1/2 (forward).
3 Release SHUTTLE ring to resume the still picture mode.

General Features (continued)

Still Picture and Frame-by-frame playback

DVD

1 Press PAUSE during playback.
The player will now go into PAUSE mode.
2 You can advance the picture frame-by-frame by pressing PAUSE repeatedly on the remote control.

Search DVD

1 Press and hold SKIP/SCAN ⏮ or ⏭ for about two seconds during playback.
The player will now go into SEARCH mode.
2 Press and hold SKIP/SCAN ⏮ or ⏭ repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X16, ◀◀X100 (backward) or ▶▶X2, ▶▶X4, ▶▶X16, ▶▶X100 (forward).
3 To exit SEARCH mode, press PLAY.

Tip

You can also select the search speed by rotating and holding the SHUTTLE ring during playback. The search speed is changed by positions you rotate and hold SHUTTLE ring.

Random Karaoke DVD

1 Press RANDOM during playback or in stop mode.
The unit automatically begins Random Playback and "RAND." appears on the display window.
2 To return to normal playback, press RANDOM until "RAND." disappears on the display window.

Tips

By pressing SKIP/SCAN ⏮ or ⏭ during Random playback, the unit selects another title and resumes Random playback.

Note

This function only works with DVD Karaoke discs.

Repeat DVD

DVD Video Discs - Repeat Chapter/Title/Off

1 To repeat the currently playing chapter, press REPEAT.
The Repeat Chapter icon appears on the TV screen.
2 To repeat the title currently playing, press REPEAT a second time.
The Repeat Title icon appears on the TV screen.
3 To cancel Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the TV screen.

Repeat A-B DVD

To repeat a sequence in a title:

1 Press A-B at your chosen starting point.
A- appears briefly on the TV screen.
2 Press A-B again at your chosen end point.
A-B appears briefly on the TV screen, and the repeat sequence begins (a-b repeat appears on the player's display).
3 To cancel the sequence, press A-B.

Time Search DVD

The Time Search function allows you to start playing at any chosen time on the disc.

1 Press DISPLAY during playback. The on-screen display appears on the screen.
The Time Search box shows the elapsed playing time of the current disc.
2 Within 10 seconds, press ▲/▼ to select the Time Search icon in the on-screen display.
The -:--:-- appears in the Time Search box.
3 Within 10 seconds, use the number buttons to enter the required start time. Enter hours, minutes, and seconds from left to right in the box.
If you enter the wrong numbers, press CLEAR to remove the numbers you entered. Then enter the correct numbers.
4 Within 10 seconds, press SELECT/ENTER to confirm the start time.
Playback starts from the selected time on the disc. If you enter an invalid time, playback will continue from the current point.

3D Surround DVD

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.

1 Press SOUND to select "3D SUR" during playback.
2 To turn off the 3D Surround effect, press SOUND again to select "NORM".

General Features (continued)

Zoom DVD

The Zoom function allows you to enlarge the video image and to move through the enlarged image.

1 Press ZOOM during playback or still playback to activate the Zoom function.
If you press ZOOM repeatedly, the magnification level increases up to six times.

2 Use the ◀▶▲▼ buttons to move through the zoomed picture.

3 Press CLEAR to resume normal playback or return to the paused image.

Note

- The zoom function may not work for some DVDs.
- The zoom function may not work on multi-angle scenes.

Marker Search DVD

You can start playback from a memorized point. Up to nine points can be memorized.
To enter a mark, follow these steps.

1 During disc playback, press MARKER when playback reaches the spot that you want to memorize.
The Marker icon will appear on the TV screen briefly.

2 Repeat step 1 to enter up to nine Marker points on a disc.

To Recall a Marked Scene

1 During disc playback, press SEARCH.
The MARKER SEARCH menu will appear on the screen.

2 Within 10 seconds, press ◀/▶ to select a Marker number that you want to recall.

3 Press SELECT/ENTER.
Playback will start from the Marked scene.

4 To remove the MARKER SEARCH menu, press SEARCH.

To clear a Marked Scene

1 During disc playback, press SEARCH.
The MARKER SEARCH menu will appear on the screen.

2 Press ◀/▶ to select the Marker number that you want to erase.

3 Press CLEAR.
The Marker number will be erased from the list.

4 Repeat steps 2 and 3 to erase additional Marker numbers.

5 To remove the MARKER SEARCH menu, press SEARCH.

Special DVD Features DVD

Checking the contents of DVD Video discs: Menus

DVDs may contain menus that allow you to access special features. To use the disc menu, press MENU. Then, press the appropriate number button to select an option. Or, use the ◀/▶/▲/▼ buttons to highlight your selection, then press SELECT/ENTER.

Title Menu DVD

1 Press TITLE.
If the current title has a menu, the menu will appear on the screen. Otherwise, the disc menu may appear.

2 The menu can list camera angles, spoken language and subtitle options, and chapters for the title.

3 To remove the title menu, press TITLE again.

Disc Menu DVD

1 Press MENU.
The disc menu is displayed.

2 To remove the disc menu, press MENU again.

Camera Angle DVD

If the disc contains scenes recorded at different camera angles, you can change to a different camera angle during playback.

- Press ANGLE repeatedly during playback to select a desired angle.
The number of the current angle appears on the display.

Changing the Audio Language DVD

Press AUDIO repeatedly during playback to hear a different audio language or audio track.

Subtitles DVD

Press SUBTITLE repeatedly during playback to see the different subtitle languages.

Note

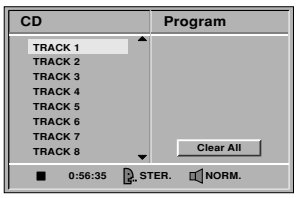
If ⃠ appears, the feature is not available on the disc.

Operation with Audio CD and MP3 Discs

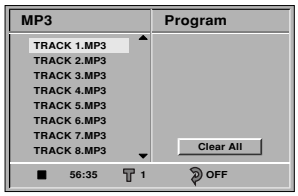
Playing an Audio CD and MP3 discs

The DVD Player can play MP3 formatted recordings on CD-ROM, CD-R, or CD-RW discs.
Before playing MP3 recordings, read the notes on MP3 Recordings on page 22.

1 Insert a disc and close the tray.
The menu appears on the TV screen.



Audio CD menu



MP3 menu

2 Press ▲/▼ to select a track then press PLAY.
Playback starts.
During playback, the current track's elapsed playing time will appear on the display.
Playback will stop at the end of the disc.

3 To stop playback at any other time, press STOP.

Pause CD MP3

1 Press PAUSE during playback.
2 To return to playback, press PLAY or press PAUSE again.

Moving to another Track CD MP3

- Press SKIP/SCAN ⏮ or ⏭ briefly during playback to go to the next track or to return to the beginning of the current track.
- Press SKIP/SCAN ⏮ twice briefly to step back to the previous track.
- In case of audio CD, to go directly to any track, enter the track number using the numbered buttons (0-9) during playback.

Repeat Track/All/Off CD MP3

1 To repeat the track currently playing, press REPEAT.
The Repeat Track icon appears on the menu screen.
2 To repeat all tracks on a disc, press REPEAT a second time.
The Repeat All icon appears on the menu screen.
3 To cancel Repeat mode, press REPEAT a third time.
The Repeat Off icon appears on the menu screen.

Search CD

1 Press and hold SKIP/SCAN ⏮ or ⏭ for about two seconds during playback.
The player will now go into SEARCH mode.
2 Press and hold SKIP/SCAN ⏮ or ⏭ repeatedly to select the required speed: ◀◀X2, ◀◀X4, ◀◀X8 (backward) or ▶▶X2, ▶▶X4, ▶▶X8 (forward).
3 Search speed and direction are indicated on the menu screen.
4 To exit SEARCH mode, press PLAY.

Random CD

1 Press RANDOM during playback or when playback is stopped.
The unit automatically begins Random Playback and RANDOM or RAND. appears on the display window and menu screen.
2 To return to normal playback, press RANDOM repeatedly until RANDOM or RAND. disappears on the display window and menu screen.

Repeat A-B CD

To repeat a sequence.
1 During disc playback, press A-B at your chosen starting point.
The Repeat icon and A - appears on the menu screen.
2 Press A-B again at your chosen end point.
The Repeat icon and A B appears on the menu screen, and the sequence begins to play repeatedly.
3 To exit the sequence and return to normal play, press A-B again.
The Repeat icon and OFF appear on the menu screen.

3D Surround CD

This unit can produce a 3D Surround effect, which simulates multi-channel audio playback from two conventional stereo speakers, instead of the five or more speakers normally required to listen to multi-channel audio from a home theater system.
1 Press SOUND to select 3D SUR during playback.
2 To turn off the 3D Surround effect, press SOUND again to select NORM.

Changing the Audio Channel CD

Press AUDIO repeatedly during playback to hear a different audio channel (STEREO, LEFT, or RIGHT).

Programmed Playback CD MP3

Programmed Playback with Audio CD and MP3 Discs

Program allows you to store your favorite tracks for a particular disc in the player memory.

Program can contain 32 tracks (Audio CD) or 60 tracks (MP3 disc).

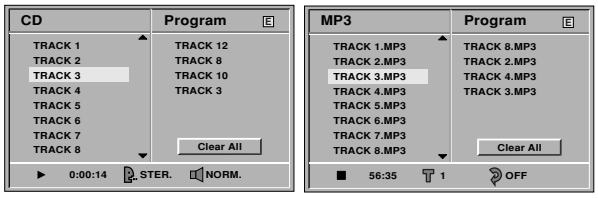
1 Insert the disc and close the tray.
The menu is displayed on the TV screen.

2 Press PROGRAM during playback or in the stop mode to enter the Program Edit mode.
The E mark will appear to the right of the word Program on the right side of the menu screen.

Note
Press PROGRAM to exit the Program Edit mode; the E mark will disappear.

3 Press ▲/▼ to select a track, then press SELECT/ENTER to place the selected track on the Program list.

4 Repeat step 3 to place additional tracks on the Program list.



Audio CD menu **MP3 menu**

5 Press ▶.
The programmed track you selected last is highlighted on the program list.

6 Press ▲/▼ to select the track you want to start playing.
Press TITLE to move to the next page.
Press MENU to move to the previous page.

7 Press PLAY to start.
Playback begins in the order in which you programmed the tracks and PROG. appears on the menu screen. Playback stops after all of the tracks on the Program list have played once.

Repeat Programmed Tracks

- To repeat the track currently playing, press REPEAT.
  The Repeat Track icon appears on the menu screen.
- To repeat all tracks on the program list, press REPEAT a second time.
  The Repeat All icon appears on the menu screen.
- To cancel Repeat mode, press REPEAT a third time.
  The Repeat Off icon appears on the menu screen.

Erasing a Track from Program List

1 Press PROGRAM during playback or in the stop mode to enter the Program Edit mode.
The E mark will appear.
2 Press ▶ to move to the Program list.
3 Use ▲/▼ to select the track that you wish to erase from the Program list.
4 Press CLEAR.
The track will be erased from the Program list.

Erasing the Complete Program List

1 Follow steps 1-2 of Erasing a Track from Program List as above.
2 Use ▲/▼ to select Clear All, then press SELECT/ENTER.
The complete Program for the disc will be erased.
The programs are also cleared when the disc is removed.

To resume normal playback from programmed playback

Press and hold PROGRAM for 3 seconds until PROG. indicator disappears in the display window.

Additional Information

Screen Saver

The screen saver picture appears when you leave the DVD Player in stop mode for about five minutes.
After the Screen Saver has been engaged for about five minutes, the DVD Player will automatically turn itself off.

Video Mode Setting DVD

- With certain discs, the playback picture may be flickering or Dot Crawl is shown on straight lines. That means Vertical interpolation or De-interlace is not perfectly matched with the disc. In this case, the picture quality may be improved by changing the video mode.
- To change the video mode, press and hold DISPLAY about 3 seconds during disc playback. The new video mode number selected is displayed on the TV screen. Check whether the video quality has improved. If not, repeat the above procedure until picture quality is improved.
- Video mode change sequence:
  MODE1 → MODE2 → MODE3 → MODE4 → MODE5 → MODE1
- If you turn off the the power, the video mode will be back to initial state (MODE1).

HDCD Playback

HDCD is a process that increases the fidelity of both specially encoded HDCD discs and standard CD audio discs. When an HDCD-encoded disc is playing, the special decoder is automatically activated and the HDCD Indicator lights. No user intervention is required.
To enjoy the benefits of HDCD, your DVD Player must be connected to your A/V receiver via the Analog Audio Outputs. However, if your A/V receiver or surround processor is equipped with built-in HDCD decoding, you may also use a Coaxial or Optical digital audio connection so that the HDCD processing is done there.

Notes on MP3 Discs

About MP3

- An MP3 file is audio data compressed by using MPEG1, the audio layer-3 file-coding scheme. We call files that have the .mp3 file extension MP3 files.
- The player can not read an MP3 file that has a file extension other than .mp3.
- The player can not read a fake MP3 file that has a file extension .mp3.

MP3 Disc compatibility with this player is limited as follows:

1. Sampling Frequency/ only at 44.1kHz
2. Bit rate/ within 32 - 320kbps
3. CD-R physical format should be ISO 9660
4. If you record MP3 files using the software which cannot create a FILE SYSTEM, for example Direct-CD etc., it is impossible to playback MP3 files. We therefore recommend that you use Easy-CD Creator, which creates an ISO9660 file system.
5. A single session disc requires MP3 files in the first track. If there is no MP3 file in the 1st track, it cannot playback MP3 files. If you wish to playback MP3 files, format all the data in the disc or use a new one.
6. We do not recommend using CD-RW discs. Please use finished CD-R discs only.
7. File names should be named using 8 letters or less and must incorporate the .mp3 extension e.g. “********.MP3”.
8. Do not use special characters such as “_?!><+*}{`[@]:;\V.,” etc.
9. Total number of files on the disc should be less than 200.
10. Use 74 minute CD-R discs (650M), do not use 80 minute CD-R (700M) software.

This DVD player requires discs/recordings to meet certain technical standards in order to achieve optimal playback quality. Pre-recorded DVDs are automatically set to these standards. There are many different types of recordable disc formats (including CD-R containing MP3 files).

Customers should also note that permission is required in order to download MP3 files and music from the Internet. Our company has no right to grant such permission. Permission should always be sought from the copyright owner.

Troubleshooting

Check the following guide for the possible cause of a problem before contacting service.

Symptom	Cause	Correction
No power.	• The power cord is disconnected.	• Plug the power cord into the wall outlet securely.
The power is on, but the DVD player does not work.	• No disc is inserted.	• Insert a disc. (Check that the DVD or, audio CD indicator in the display window is lit.)
No picture.	• The TV is not set to receive DVD signal output.	• Select the appropriate video input mode on the TV so the picture from the DVD player appears on the TV screen.
	• The video cable is not connected securely.	• Connect the video cable securely.
	• The connected TV power is turned off.	• Turn on the TV.
No sound.	• The equipment connected with the audio cable is not set to receive DVD signal output.	• Select the correct input mode of the audio receiver so you can listen to the sound from the DVD player.
	• The audio cables are not connected securely.	• Connect the audio cable securely.
	• The power of the equipment connected with the audio cable is turned off.	• Turn on the equipment connected with the audio cable.
	• The Digital Audio Output is set to the wrong position.	• Set the Digital Audio Output to the correct position, then turn on the DVD player again by pressing POWER.
The playback picture is poor.	• The disc is dirty.	• Clean the disc.
The DVD player does not start playback.	• No disc is inserted.	• Insert a disc. (Check that the DVD, or audio CD indicator in the DVD display is lit.)
	• An unplayable disc is inserted.	• Insert a playable disc. (Check the disc type, color system, and Regional code.)
	• The disc is placed upside down.	• Place the disc with the playback side down.
	• The disc is not placed within the guide.	• Place the disc on the disc tray correctly inside the guide.
	• The disc is dirty.	• Clean the disc.
	• The Rating level is set.	• Cancel the Rating function or change the rating level.
The remote control does not work properly.	• The remote control is not pointed at the remote sensor of the DVD player.	• Point the remote control at the remote sensor of the DVD player.
	• The remote control is too far from the DVD player.	• Operate the remote control within 23 ft (7 m).
	• There is an obstacle in the path of the remote control and the DVD player.	• Remove the obstacle.
	• The batteries in the remote control are exhausted.	• Replace the batteries with new ones.

Language Code List

Enter the appropriate code number for the initial settings “Disc Audio”, “Disc Subtitle” and/or “Disc Menu” (See page 14).

Code	Language	Code	Language	Code	Language	Code	Language
6566	Abkhazian	7074	Fiji	7678	Lingala	8373	Singhalese
6565	Afar	7073	Finnish	7684	Lithuanian	8375	Slovak
6570	Afrikaans	7082	French	7775	Macedonian	8376	Slovenian
8381	Albanian	7089	Frisian	7771	Malagasy	8379	Somali
6577	Ameharic	7176	Galician	7783	Malay	6983	Spanish
6582	Arabic	7565	Georgian	7776	Malayalam	8385	Sudanese
7289	Armenian	6869	German	7784	Maltese	8387	Swahili
6583	Assamese	6976	Greek	7773	Maori	8386	Swedish
6588	Aymara	7576	Greenlandic	7782	Marathi	8476	Tagalog
6590	Azerbaijani	7178	Guarani	7779	Moldavian	8471	Tajik
6665	Bashkir	7185	Gujarati	7778	Mongolian	8465	Tamil
6985	Basque	7265	Hausa	7865	Nauru	8484	Tatar
6678	Bengali; Bangla	7387	Hebrew	7869	Nepali	8469	Telugu
6890	Bhutani	7273	Hindi	7879	Norwegian	8472	Thai
6672	Bihari	7285	Hungarian	7982	Oriya	6679	Tibetan
6682	Breton	7383	Icelandic	8065	Panjabi	8473	Tigrinya
6671	Bulgarian	7378	Indonesian	8083	Pashto, Pushto	8479	Tonga
7789	Burmese	7365	Interlingua	7065	Persian	8482	Turkish
6669	Byelorussian	7165	Irish	8076	Polish	8475	Turkmen
7577	Cambodian	7384	Italian	8084	Portuguese	8487	Twi
6765	Catalan	7465	Japanese	8185	Quechua	8575	Ukrainian
9072	Chinese	7487	Javanese	8277	Rhaeto-Romance	8582	Urdu
6779	Corsican	7578	Kannada	8279	Rumanian	8590	Uzbek
7282	Croatian	7583	Kashmiri	8285	Russian	8673	Vietnamese
6783	Czech	7575	Kazakh	8377	Samoan	8679	Volapük
6865	Danish	7589	Kirghiz	8365	Sanskrit	6789	Welsh
7876	Dutch	7579	Korean	7168	Scots Gaelic	8779	Wolof
6978	English	7585	Kurdish	8382	Serbian	8872	Xhosa
6979	Esperanto	7679	Laothian	8372	Serbo-Croatian	7473	Yiddish
6984	Estonian	7665	Latin	8378	Shona	8979	Yoruba
7079	Faroese	7686	Latvian, Lettish	8368	Sindhi	9085	Zulu

Country Code List

Enter the appropriate code number for the initial setting “Country Code” (See page 16).

Code	Country
AD	Andorra
AE	United Arab Emirates
AF	Afghanistan
AG	Antigua and Barbuda
AI	Anguilla
AL	Albania
AM	Armenia
AN	Netherlands Antilles
AO	Angola
AQ	Antarctica
AR	Argentina
AS	American Samoa
AT	Austria
AU	Australia
AW	Aruba
AZ	Azerbaidjan
BA	Bosnia-Herzegovina
BB	Barbados
BD	Bangladesh
BE	Belgium
BF	Burkina Faso
BG	Bulgaria
BH	Bahrain
BI	Burundi
BJ	Benin
BM	Bermuda
BN	Brunei Darussalam
BO	Bolivia
BR	Brazil
BS	Bahamas
BT	Bhutan
BV	Bouvet Island
BW	Botswana
BY	Belarus
BZ	Belize
CA	Canada
CC	Cocos (Keeling) Islands
CF	Central African Republic
CG	Congo
CH	Switzerland
CI	Ivory Coast
CK	Cook Islands
CL	Chile
CM	Cameroon
CN	China
CO	Colombia
CR	Costa Rica
CS	Former Czechoslovakia
CU	Cuba
CV	Cape Verde
CX	Christmas Island
CY	Cyprus
CZ	Czech Republic
DE	Germany
DJ	Djibouti
DK	Denmark
DM	Dominica
DO	Dominican Republic
DZ	Algeria
EC	Ecuador
EE	Estonia
EG	Egypt
EH	Western Sahara
ER	Eritrea
ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
FM	Micronesia
FO	Faroe Islands
FR	France
FX	France (European Territory)
GA	Gabon
GB	Great Britain
GD	Grenada
GE	Georgia
GF	French Guyana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe (French)
GQ	Equatorial Guinea
GR	Greece
GS	S. Georgia & S. Sandwich Isls.
GT	Guatemala
GU	Guam (USA)
GW	Guinea Bissau
GY	Guyana
HK	Hong Kong
HM	Heard and McDonald Islands
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
IO	British Indian Ocean Territory
IQ	Iraq
IR	Iran
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia6
KI	Kiribati
KM	Comoros
KN	Saint Kitts & Nevis Anguilla
KP	North Korea
KR	South Korea
KW	Kuwait
KY	Cayman Islands
KZ	Kazakhstan
LA	Laos
LB	Lebanon
LC	Saint Lucia
LI	Liechtenstein
LK	Sri Lanka
LR	Liberia
LS	Lesotho
LT	Lithuania
LU	Luxembourg
LV	Latvia
LY	Libya
MA	Morocco
MC	Monaco
MD	Moldavia
MG	Madagascar
MH	Marshall Islands
MK	Macedonia
ML	Mali
MM	Myanmar
MN	Mongolia
MO	Macau
MP	Northern Mariana Islands
MQ	Martinique (French)
MR	Mauritania
MS	Montserrat
MT	Malta
MU	Mauritius
MV	Maldives
MW	Malawi
MX	Mexico
MY	Malaysia
MZ	Mozambique
NA	Namibia
NC	New Caledonia (French)
NE	Niger
NF	Norfolk Island
NG	Nigeria
NI	Nicaragua
NL	Netherlands
NO	Norway
NP	Nepal
NR	Nauru
NU	Niue
NZ	New Zealand
OM	Oman
PA	Panama
PE	Peru
PF	Polynesia (French)
PG	Papua New Guinea
PH	Philippines
PK	Pakistan
PL	Poland
PM	Saint Pierre and Miquelon
PN	Pitcairn Island
PR	Puerto Rico
PT	Portugal
PW	Palau
PY	Paraguay
QA	Qatar
RE	Reunion (French)
RO	Romania
RU	Russian Federation
RW	Rwanda
SA	Saudi Arabia
SB	Solomon Islands
SC	Seychelles
SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan Mayen Islands
SK	Slovak Republic
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Saint Tome and Principe
SU	Former USSR
SV	El Salvador
SY	Syria
SZ	Swaziland
TC	Turks and Caicos Islands
TD	Chad
TF	French Southern Territories
TG	Togo
TH	Thailand
TJ	Tadjikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
TO	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania
UA	Ukraine
UG	Uganda
UK	United Kingdom
UM	USA Minor Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State
VC	Saint Vincent & Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (USA)
VN	Vietnam
VU	Vanuatu
WF	Wallis and Futuna Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe

Specifications

General

Power requirements	AC 120V , 60 Hz
Power consumption	14W
Dimensions (approx.)	430 X 76.5 X 242 mm (16.9 x 3.0 x 9.5 inches) (w x h x d)
Mass (approx.)	2.8 kg (6.2 lbs)
Operating temperature	5˚C to 40˚C (41˚F to 104˚F)
Operating humidity	5 % to 90 %

System

Laser	Semiconductor laser, wavelength 650 nm
Signal system	NTSC
Frequency response	DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz
Signal-to-noise ratio	More than 100dB (ANALOG OUT connectors only)
Harmonic distortion	Less than 0.008%
Dynamic range	More than 100 dB (DVD) More than 95 dB (CD)

Outputs

VIDEO OUT	1 Vp-p 75 ohms, sync negative
S-VIDEO OUT	(Y) 1.0 V (p-p), 75 Ω, negative sync, Mini DIN 4-pin x 1 (C) 0.3 V (p-p) 75 ohms
COMPONENT VIDEO OUT	(Y) 1.0 V (p-p), 75 Ω, negative sync, RCA jack x 1 (Pb)/(Pr) 0.7 V (p-p), 75 Ω, RCA jack x 2
Audio output (digital audio)	0.5 V (p-p), 75 Ω, RCA jack x 1
Audio output (optical audio)	5 V (p-p), 75 Ω, Optical connector x 1
Audio output (analog audio)	1.0 Vrms (1 kHz, 0 dB), 600 Ω, RCA jack (L, R) x 1

Accessory

S-video cable 1
Video cable 1
Audio cable 1
Remote control 1
Batteries 2

- Design and specifications are subject to change without notice.

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Notes

ZENITH ELECTRONICS CORPORATON
DVD PLAYER LIMITED WARRANTY - USA

Zenith will repair or replace your product, at Zenith's option, if it proves to be defective in material or workmanship under normal use, during the warranty period listed below from the date of original consumer purchase.
This warranty is available only to the original purchaser of the product and effective only when used in the United States, excluding U.S. Territories.

90 DAYS LABOR/ONE YEAR PARTS WARRANTY **0 to 90 days:** Return the defective unit to your Dealer for replacement. **91 to 365 days:** Call **1-800-984-9349** for instructions on getting the defective unit repaired or replaced. **Repaired or Replacement Units** are warranted for the remaining period of the original warranty.	**HOW SERVICE IS HADLED:** If replacement unit is available and to get the unit in 2 working days, Zenith requires a reserved deposit by credit card as surety for advance shipment. Your credit card will not be charged if you return defective unit in 10 working days. For further instruction, call **1-800-984-9349**. Please retain your box to return the unit to Zenith after first 90 days. Shipping charges both ways will be paid by Zenith after 90 days up to 365 days of the date of your purchase. After 365 days of the date of your purchase, you pay in-bound shipping charges and Zenith pays return shipping charges.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. TO THE EXTENT ANY IMPLIED WARRANTY IS REQUIRED BY LAW, IT IS LIMITED IN DURATION TO THE EXPRESS WARRANTY PERIOD ABOVE. ZENITH WILL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS, IN CONNECTION WITH THE PRODUCT. SOME STATES DO NOT ALLOW LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY DOES NOT APPLY TO:

1. Damages or problems that result from shipping, installation, maintenance, or separate system components; and
2. Damages or problems that result from misuse, abuse, operation outside environmental specifications or contrary to the requirements or precautions in the Operating Guide, accident, lightning strikes or other natural causes, unauthorized modification or alteration, incorrect electrical current or voltage, other causes not arising out of defect in material or workmanship, software errors that do not disable functionality, operating and software protocols adopted after date of manufacture or for outside the U.S., or institutional or commercial use.
3. **Therefore, the cost of repair or replacement of such defective product shall be borne by the customer**.

CUSTOMER ASSISTANCE NUMBERS:

For Warranty Service after first 90 Days	**Call 1-800-984-9349** (Mon.- Fri. 7 AM - 7 PM CT) Retain your dated sales receipt to prove date of purchase as well as your box for shipping the unit to Zenith after 90 days of the date of your purchase. Legible copy of your sales receipt must be submitted with the unit at the time warranty service is provided.
For Post Warranty Repair	For repair or replacement after Warranty has expired, **Call 1-800-984-9349** (Mon.- Fri. 7 AM - 7 PM CT)
For Where-to buy, Product Assistance, or Customer Assistance	**Call 1-877-993-6484** (Mon.- Fri. 7 AM - 8 PM CT) **(1-877-9ZENITH)** (Sat. 8 AM - 5 PM CT) Or visit our website at http://www.zenithservice.com

FOR SERVICE AFTER 90 DAYS:

You must call **1-800-984-9349** (Mon. – Fri. 7 AM to 8PM CT) and select appropriate option from the menu to confirm the product is defective and to obtain Return Authorization (RA). If requesting 2-day advance shipment, service rep will ask for your credit card number. During the warranty period, Zenith will send you a return-shipping label. After you obtain RA for return, please box your unit with a copy of the sales receipt and enough packing material to assure undamaged delivery of your product. When you receive the label, place it on the box and call the 800 # in the instruction for pick-up. When your unit is received, Zenith will repair or replace your unit in accordance with this Limited Warranty. For advance shipment, the return label will come with the replacement unit sent to you. Please follow boxing and shipping instructions above.

ZENITH ELECTRONICS CORPORATION
2000 MILLBROOK DRIVE
LINCOLNSHIRE, IL 60069

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